Centro Universitario Internacional

BIO 209E Anatomy and Physiology II

Professor: Juan C. Rodriguez
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Email: jcrodagu@upo.es
Office Hours: Wed. & Fri. 11:30AM-2:30PM
(appointment required)

Professor: Eduardo Dominguez
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Office Hours: Mon. & Wed. 10:30AM-11:30AM
(appointment required)

Course Information:
Fall 2018
Tuesdays and Thursdays
9:00AM-10:20AM

Lab sessions
Thursdays 12:00PM-2:50PM

Course Description

This is the second part of Human Anatomy & Physiology. During this course, you will study the fundamentals on human body structure, its functions and some disorders using an organ-system approach. It is crucial for you to understand how cells and organs are coordinated within an integrated human physiology. Closely related systems as endocrine, cardiovascular, immune, respiratory, urinary, or digestive system develop an overall coordinated physiology. The lab sessions of this course are related with the lectures and will reinforce concepts presented in discussions and in the text. It will be accomplished through organ dissections, model studies and simulation labs. We will also examine how certain system malfunctions may affect the delicate physiology balance (homeostasis), and how human body compensates to maintain itself.

Course Goals and Methodology

The goals of this course are to provide the student with an understanding of the general concepts and basic laboratory techniques in human Anatomy and Physiology. The course is oriented towards standard healthy aspects of human Anatomy and Physiology; however particular pathological aspects will be also described.

The course is structured in lectures and lab sessions. Students are expected to have read the textbook chapters and lab protocols before the corresponding lectures and lab sessions, respectively. Lecture presentations, lab protocols and other course materials are posted on Blackboard prior to lectures and lab sessions.

Lecture sessions will include lecturing and discussion. Homework assignments may include the discussion of case studies and problems on the Blackboard discussion forums and an online quiz per lecture on Blackboard.
Lab sessions will include presentation of the experimental procedures and experimental work. General lab safety rules must be observed at all times. A quiz per lab session will be posted on Blackboard.

Learning Objectives

Upon successful completion of the course students will be able to:

- Understanding homeostasis and how different physiological systems participate in its maintenance.
- Identifying some pathological malfunctions, their main symptoms.
- Anticipating consequences of system malfunction on homeostasis and the existing physiological mechanisms to restore it.
- Solving biological problems;

Required Texts

- Hole's Human Anatomy and Physiology, 14th Edition. Shier, Butler, Lewis, McGraw Hill., 2016.

OR

- Hole's Human Anatomy and Physiology, 15th Edition. Shier, Butler, Lewis, McGraw Hill., 2019.

General Course Policies

Communication

Unless stated otherwise, all course announcements will be posted online in Virtual Campus (Blackboard). This is to include, but not limited to, assignments, deadlines, exam calls, homework, and changes in schedule. Electronic communications between students and instructors are also handled in Virtual Campus.

If you need academic assistance, please contact the instructor involved in that particular topic.

During the sessions

Use of cell phones, pagers, MP3 players, headphones, texting, etc. is prohibited during class time. Please turn all of these devices to vibration mode or off upon entering the classroom. If emergency communications are required, please excuse yourself from lecture/lab.

Use of laptops for academic purposes (*related with **this** course)* is allowed. Running other applications in the background for non-academic purposes is NOT permitted.

For safety reasons, eating or drinking is strictly forbidden during lab sessions.

Missed or late activities

It is the student's responsibility to be informed about exam dates and required course activities, due dates, etc before making any travel plans during the semester.

Every piece of homework will include its due date. Incomplete or late homework will receive 10% discount in credit (within 48 hours after deadline) or 50% discount in credit (over 48 hours after deadline). There is no chance to make up late homework.

Exams missed due to an excused (e.g. medical) absence must be made up within a week of returning to classes. Exams missed due to unexcused absence will not be made up.

There will be no make up for missed lab sessions. Labs missed due to an excused absence (e.g. medical) will be graded using the overall average lab grade obtained in those lab sessions attended. Labs missed due to unexcused absence will not be made up and will receive zero points as grade.

Course Requirements and Grading

Four equally-weighted midterm exams	60%
Lab quizzes (homework)	10%
Practical cases (homework)	20%
Participation	10%

Participation rubric

Participation grades (up to 10%)	**Inadequate**	**Below expectations**	**Meets expectations**	**Exemplary**
Contributions to discussions	Grade: 0% Student never contributes to class discussion, or contributes just to distort the sessions.	Grade: 1.2% Student rarely contributes to class discussion. Irrelevant contributions.	Grade: 2.1% Student sometimes contributes to class discussion.	Grade: 3% Student regularly contributes to class discussion. Smart and interesting contributions.
Answers to questions during sessions	Grade: 0% Student fails to respond to questions. Student regularly caught distracted.	Grade: 1.2% Student responds to questions, but answers are usually wrong or irrelevant.	Grade: 2.1% Student responds to questions. Answers are acceptable regardless they may be wrong sometimes.	Grade: 3% Student responds to questions. Answers are acceptable usually correct and smart.
Behavior Attitude	Grade: 0% Student distracts other students, or interrupts discussion without contributing. Student	Grade: 0.8% Student is distracted, or uses electronic devices for other purposes. Student excuses frequently to	Grade: 1.8% Student uses electronic devices to follow the course. Student rarely/sometimes excuses	Grade:2% Student never generates problems in the classroom. Smooth and quiet

	attended session intoxicated/drunk. Noisy behavior, troublemaker.	leave the classroom/lab. Student frequently attend the session sleepy or sleeps in classroom.	to leave the classroom.	behavior.
Listening	Grade: 0% Student does not pay attention to other student's contributions.	Grade: 0.8% Student never/seldom pays attention to instructor.	Grade 1.4% Student regularly pays attention to instructor.	Grade: 2% Student always follows instructor explanations.

Grade Conversion scale:

Spanish grade	10	9.5-9.9	9.0-9.4	8.5-8.9	8.0-8.4	7.5-7.9	7.0-7.4	6.5-6.9	6.0-6.4	5.5-5.9	5.0-5.4	0.0-4.9
U.S. grade	A+	A	A-	B+	B	B	B-	C+	C	C	C-	F

Attendance and Punctuality

Attendance and punctuality are required. Arriving late to class is disruptive to both the professor and your classmates. Please be punctual, as your professor will count your late arrival as half of an absence. Under no circumstances may a student miss more than 6 classes (or 9 for classes that meet daily), even with a medical excuse. An excused absence is one that is accompanied by a doctor's note: signed, stamped and dated - travelling or missing a flight/train/bus/ferry, etc. is not an excuse. The note should be shown to your professor and must be handed in to the staff at the International Center office within one week of returning to class. After 3 unexcused absences your final grade will be lowered by ½ a point (Spanish grade) for each day missed (starting with the 4th absence). If you have 6 unexcused absences, you will automatically fail the class. It is each student's responsibility to be informed of exam dates, paper due dates, required excursions, etc. before planning any absences (e.g. relatives visiting, traveling, etc.) during the semester

Academic Honesty

Academic integrity is a guiding principle for all academic activity at Pablo de Olavide University. Cheating on exams and plagiarism (which includes copying from the Internet) are clear violations of academic honesty. A student is guilty of plagiarism when he or she presents another person's intellectual property as his or her own. The penalty for plagiarism and cheating is a failing grade for the assignment/exam and a failing grade for

the course. Avoid plagiarism by citing sources properly, using footnotes and a bibliography, and not cutting and pasting information from various websites when writing assignments.

Learning accommodations

If you require special accommodations, you must stop by the International Center to speak to Rubén (the Faculty coordinator) to either turn in your documentation or to confirm that our office has received it. The deadline is September 28th. Rubén will explain the options available to you.

Behavior Policy

Students are expected to show integrity and act in a professional and respectful manner at all times. A student's attitude in class may influence his/her participation grade. The professor has a right to ask a student to leave the classroom if the student is unruly or appears intoxicated. If a student is asked to leave the classroom, that day will count as an absence regardless of how long the student has been in class.

Course contents

This course includes the following content:

1. *Blood*
2. *Endocrine System*
3. *Lymphatic System & Immunity*
4. *Cardiovascular System*
5. *Respiratory System*
6. *Renal System*
7. *Digestive System*
8. *Fluids and electrolytes*
9. *Metabolism*

All those items refer to aspects of human Anatomy and Physiology

Class Schedule

Semester week #	Week day	Date	Instructor	Lecture	Lab	Textbook chapter
1	Thu	Sep 13	Rodríguez	Blood		14
2	Fri	Sep 14	Rodríguez	Blood		14
2	Tue	Sep 18	Rodríguez	Lymphatic System & Immunity		16
2	Thu	Sep 20	Rodríguez	Lymphatic System & Immunity	Blood cells types	16
3	Fri	Sep 21	Rodríguez	Endocrine System		13
3	Tue	Sep 25	Rodríguez	Endocrine System		13
4	Thu	Sep27	Rodríguez	Endocrine System	Immune reactions	13
4	Tue	Oct 2	Rodríguez	**Midterm 1**		**13,14,16**
5	Thu	Oct 4	Domínguez	Cardiovascular System	Simulation AP and EKG	
6	Tue	Oct 9	Domínguez	Cardiovascular system		15
6	Thu	Oct 11	Domínguez	Cardiovascular System	Heart Physiology	15
7	Tue	Oct 16	Domínguez	Cardiovascular System		15
7	Thu	Oct 18	Domínguez	Respiratory System	Cardiovascular. effects of exercise	19
8	Tue	Oct 23	Domínguez	Respiratory System		19
8	Thu	Oct 25	Domínguez	Respiratory System	Spirometry. Lung capacity	19
9	Tue	Oct 30	Domínguez	Renal System		**15,19**
9	Tue	Nov 6	Domínguez	**Midterm 2**		20
10	Thu	Nov 8	Domínguez	Renal System	Kidney Anat & Physiol	20
10	Tue	Nov 13	Domínguez	Renal System		20
11	Thu	Nov 15	Domínguez	Digestion	Digestive Anat & Physiol.	17
11	Tue	Nov 20	Domínguez	Digestion		17
12	Thu	Nov 22	Domínguez	**Midterm 3**	Osmosis	**17, 20**
12	Tue	Nov 27	Rodríguez	Fluid Elec		21
13	Thu	Nov 29	Rodríguez	Fluid Elec	Metabolism	21
13	Tue	Dec 4	Rodríguez	Metabolism		18
14	Tue	Dec 11	Rodríguez	Metabolism		18
14	Thu	*TBA*	Rodríguez	**Midterm 4**		**18, 21**

Holidays

Friday, October 12: *Día de la Hispanidad*
Wednesday, October 31: “Puente”. No classes will be held.
Thursday, November 1: All Saint´s Day. No classes will be held.
Thursday, December 6: *Día de la Constitución Española*. No classes will be held.